Striae Gravidarum in Iranian Women: Prevalence and Associated Factors

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Abstract: Striae gravidarum (SG) is one of the most common connective tissue changes during pregnancy that may be causing concerns. The purpose of this study was to identify associated factors with striae gravidarum (SG) in pregnant women and their possible association with the characteristics of themselves and their newborns. A cross-sectional study of 224 primiparous women delivering at an educational and therapeutic center was conducted. The data were collected via questionnaire and physical examination. The presence, absence, and severity of striae were evaluated by Davey's score. Data were analyzed by using descriptive and analytical statistics (Chi-square test, t test). 81.3 percent of the participants had developed SG. Women who developed SG had gained significantly more weight during pregnancy (14.04 ± 4.5 vs 12.2 kg ± 4.6; $P < 0.02$) and had more body mass index (23.47± 3.6 vs 21.76± 2.8; $p<0.002$). Family history of striae gravidarum in mother and sister have a significant association with the presence of SG. This study showed that genetic factors (family history striae gravidarum) and physical factors (weight gain during pregnancy and baseline body mass index) may have a very important role in developing striae gravidarum. The result of this study can help physicians to counsel Iranian pregnant women about their associated factors for striae gravidarum.

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Introduction:

The most common alteration in connective tissue of pregnant women is Striae gravidarum (SG);(1) that is no serious problem for bodily function, it is a disfiguring lesion that may cause cosmetic concerns in many women (2). SG mostly develop in the third trimester as reddish and slightly depressed streaks and disappear postpartum to leave permanent silvery scars, which are found sometimes over the breasts, thighs, hips and buttocks and commonly on the skin of abdomen.(3-5)

According to the findings of some surveys, although SG tend to occur in maximum skin stretching areas, the degree of striae formation is not correlated with the extent of body size enlargement during pregnancy. (6) In a study, Salter et al, found a correlation between the presence of striae and pelvic relaxation, a condition that is associated with decreased collagen content. (7)

It is estimated that up to 90% of pregnant women develop SG, even though some research report the prevalence to be as low as 50%. (8) Some suggested risk factors for development of SG include family history, skin type, race, birth weight (BW), baseline body mass index (BMI), age and weight gain are found; but most of these factors have not been confirmed. (3, 9, 10)